Attachment J01

Fort Rucker Electrical Distribution System

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J01.1 Fort Rucker Area Overview

Fort Rucker, Alabama is a U.S. Army Installation situated approximately 90 miles south of Montgomery, the state capital, and thirty miles northwest of Dothan. The cities of Enterprise, Daleville, and Ozark are just west, south, and east respectively. Occupying over 63,000 acres in the southeastern Alabama countryside, Fort Rucker was established in 1942 in response to the outbreak of World War II. Named after Confederate General Edmund W. Rucker, a Tennessee native, Fort Rucker became involved in Army aviation in August of 1954 when the U.S. Army Aviation School moved there from Fort Sill, Oklahoma. The Installation's population today is 11,000, with more than 4,900 active-duty personnel and 3,300 family members.

Basefields and stagefields were added to the installation's holdings as the years passed to support aviation training practices. The addition of new stagefields and changes to existing stagefields have been made to include additional acreage, update facilities and handle new equipment or other requirements. Cairns Army Airfield is located about 2 miles south of the Daleville Gate along Highway 85. The airfield is 1,297 acres in size with approximately 90 buildings. The field was acquired in 1952. Shell Army Heliport is an integral part of the operations at Fort Rucker and is located to the southwest of the Fort. Shell Army Heliport is 293 acres in size and was first acquired in 1962. The stagefields are located in several southeastern Alabama counties surrounding the Main Post. Allen Stagefield is the closest to the Daleville gate of Fort Rucker (about 4 ½ miles SW) and Louisville Stagefield is the furthest from the same gate (about 20 ½ miles NNE). There are 14 total stagefields including both the active and inactive sites. Most are within an eight-mile radius of the City of Enterprise. Refer to Section J01.7 for a complete listing of the stagefields. The stagefields are activated and deactivated in response to Army Aviation training requirements. The most recent additions were Brown, Stinson, and 10-C Stagefields in 1987.

J01.2 Electrical Distribution System Description

The Fort Rucker electrical distribution systems comprise all appurtenances physically connected to the systems from the point in which the Government ownership currently starts to the point of demarcation defined in part J01.10 of this Section. The systems may include, but are not limited to, substations, transformers, underground and overhead circuits, utility poles, switches, and vaults. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the distribution system. Under no circumstances shall the successful Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

The Contractor shall comply with all applicable federal, state, and local regulations governing the operation of the electrical system.

The Installation shall retain joint use of all electrical utility poles.

J01.2.1 Electrical Distribution System Fixed Equipment Inventory

J01.2.1.1 Description

Fort Rucker owns and operates an electrical utility system on the Main Post consisting of:

1. One 115 kV transmission substation
   a. The Main Substation is the metering point for the power purchased from Alabama Power Company (APC). It is a conventional, outdoor, air-insulated substation consisting of one incoming 115 kV transmission line bay, two 25 MVA 115-44 kV power transformers, one 115 kV oil circuit breaker, two 115 kV circuit switchers, three 44 kV circuit switchers, and three 44 kV oil circuit breakers. The substation provides the 115-44 kV transformation for the Installation's sub-transmission system. The substation also contains a 5 MVA 44 kV – 4.16 kV power transformer, which interconnects the Army-owned peak-shaving natural gas plant to this 44 kV bus. This substation is fed from the APC 115 kV radial transmission line originating at APC's Pinckard Substation.
2. Three 44 kV distribution substations
   a. Substation #1, which supplies the southern portion of the Main Post area, consists of one incoming 44 kV transmission line bay, two 10,000 kVA 44 – 12.5 kV power transformers, one 12.5 kV voltage regulator, and five 12.5 kV feeder circuit breakers. It is a conventional, outdoor, air-insulated substation configured in a main and transfer bus arrangement. The substation provides control and over-current protection for five 12.5 kV circuits.
   b. Station #2, which supplies the northern portion of the Main Post area, Ech, Lowe and Lake Tholocco, consists of two incoming 44 kV transmission line bays, two 10,000 kVA 44 – 12.5 kV power transformers, one 12.5 kV voltage regulator, and six 12.5 kV feeder circuit breakers. It is a conventional, outdoor, air-insulated substation configured in a main and transfer bus arrangement. The substation provides control and over-current protection for six 12.5 kV circuits.
   c. Substation #3, which supplies the eastern portion of the Main post area, Hanchey and Knox, consists of one incoming 44 kV transmission line bay, two 10,000 kVA 44 – 12.5 kV load tap-changing power transformers, and nine 12.5 kV feeder circuit breakers. It is a conventional, outdoor, air-insulated substation configured in a main and transfer bus arrangement. The substation provides control and over-current protection for all nine of the 12.5 kV circuits.
3. Approximately 5.7 circuit-miles of 44 kV overhead subtransmission line
   a. The 44 kV sub-transmission system supplies three 44 – 12.5 kV distribution substations. It is constructed of steel poles and davit arms with conventional porcelain suspension insulators supporting ACSR conductors. It is normally operated in an open loop configuration using pole-mounted, motor-operated air break switches to perform loop switching operations.
4. Approximately 57.1 circuit-miles of 12.5 kV overhead primary distribution line.
5. Approximately 3.6 circuit-miles of 12.5 kV underground primary distribution line.
6. Approximately 75 miles of other conductors described below.

Fort Rucker owns and operates an electric utility system at Cairns Army Airfield consisting of distribution lines being fed from both the Alabama Power Company (APC) and the Pea River

Electric Cooperative. The majority of the primary service facilities at Cairns Army Airfield were installed in the early 1980's and consist of both overhead and underground transmission lines as well as transformers.

The electrical distribution system at Shell Army Heliport consists of approximately 9,000 feet of overhead and 3,100 feet of underground conductors. The overhead lines were replaced in 2001. The total transformer capacity is 878 KVA. Shell Army Heliport is served by the Alabama Power Company for electricity.

Electrical equipment at the stagefields consists of both primary and secondary service as well as transformers. Electrical service may be underground or overhead.

J01.2.1.2 Inventory

Table 1 provides a general listing of the major fixed assets for the Fort Rucker electrical distribution system. The system will be sold in an "as is, where is" condition without any warrant, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned herein, is considered part of the purchased utility.

J01.2.1.2.A Electrical Distribution System Inventory – Main Post

Table 1
Fixed Inventory
Electrical Distribution System – Fort Rucker

Item	Quantity	Unit	Approximate Year of Construction
Overhead lines:			
44 kV	5.65	Circuit Miles	1977
12.5 kV, 3 phase, large	5.71	Circuit Miles	1977
12.5 kV, 3 phase, small	51.39	Circuit Miles	1975
7.2 kV, 1 phase	9.52	Circuit Miles	1976
Secondary	16.39	Circuit Miles	1975
Gang-Op, Air Break Switches	28	Units	1975
3 Phase Oil Circuit Reclosers	8	Units	1983
Capacitors	12,000	Units	1983
Underground Lines:			
12.5 kV, 3 phase, large	0.08	Circuit Miles	1983
12.5 kV, 3 phase, small	3.54	Circuit Miles	1983
7.2 kV, 1 phase	1.86	Circuit Miles	1983
Secondary	1.37	Circuit Miles	1983
Transformers – Pole Mount:			
15 kVA and smaller	135	Units	1982
25 kVA	317	Units	1982
37.5 kVA	285	Units	1982
50 kVA	203	Units	1982
75 kVA	128	Units	1982
100 kVA	76	Units	1982
167 kVA	4	Units	1982
Transformers – Pad Mount:			

1? , - 50 kVA and smaller	7	Units	1983
1? , - 75 kVA	13	Units	1983
1? , - 100 kVA	16	Units	1983
1? , - 167 kVA	21	Units	1983
3? , - 75 kVA and smaller	0	Units	1983
3? , - 112 kVA	1	Units	1983
3? , - 150 kVA	5	Units	1983
3? , - 225 kVA	7	Units	1983
3? , - 300 kVA	15	Units	1983
3? , - 500 kVA	21	Units	1983
3? , - 750 kVA	1	Units	1983
3? , - 1,000 kVA	3	Units	1983
3? , - 1,500 kVA	4	Units	1983
3? , - 2,000 kVA	3	Units	1983
Services:			
3 Phase	750	Units	1978
1 Phase	1,100	Units	1978
Street Lights:			
Fixtures	3,000	Units	1983
Poles	1,600	Units	1983
Conductor	28.4	Circuit Miles	1983
Substations:			
Main -			
115 kV Structure/Bus	1	Unit	1977
115 kV OCB’s	3	Unit	1977
Power Transformer – 25,000 kVA	2	Unit	1977
Power Transformer – 5, 000 kVA	1	Unit	1977
44 kV Structure/Bus	4	Unit	1977
44 kV OCB’s	6	Unit	1980
Miscellaneous	1	Lump	1977
Substation 1-			
44 kV Structure/Bus	1	Unit	1977
44 kV OCB’s	2	Unit	1977
Power Transformer - 10,000 kVA	2	Unit	1977
12.5 kV Structure/Bus	6	Unit	1977
12.5 kV OCB’s	5	Unit	1977
12.5 kV Voltage Regulator	1	Unit	1977
12.5 kV Capacitor Bank	1,800	Unit	1977
Miscellaneous	1	Lump	1977
Substation 2-			
44 kV Structure/Bus	2	Unit	1977
44 kV OCB’s	2	Unit	1977
Power Transformer - 10,000 kVA	2	Unit	1977
12.5 kV Structure/Bus	6	Unit	1977
12.5 kV OCB’s	6	Unit	1977
12.5 kV Voltage Regulator	1	Unit	1977
12.5 kV Capacitor Bank	1,800	Unit	1977
Miscellaneous	1	Lump	1977
Substation 3-			
44 kV Structure/Bus	1	Unit	1977
44 kV OCB’s	2	Unit	1977
Power Transformer - 10,000 kVA	2	Unit	1977
12.5 kV Structure/Bus	5	Unit	1977
12.5 kV OCB’s	9	Unit	1977
12.5 kV Voltage Regulator	1	Unit	1977

12.5 kV Capacitor Bank	1,800	Unit	1977
Miscellaneous	1	Lump	1977

Aerial Gunnery Range

This range receives electrical service from the Alabama Power Company.

Table 2
Fixed Inventory
Electrical Distribution System – Aerial Gunnery Range

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
UP	(see legend below)	135,280	Linear Feet	1991	
OP		8,500	Linear Feet	1991	
S1		4,500	Linear Feet	1991	
S2		18,150	Linear Feet	1991	
S3		43,420	Linear Feet	1991	
S4		62,100	Linear Feet	1991	
S5		60,280	Linear Feet	1991	
S6		43,600	Linear Feet	1991	
S7		10,100	Linear Feet	1991	
Total		385,930	Linear Feet		
Transformer - 112.5 KVA		9	Each	1991	
Transformer - 75 KVA		1	Each	1991	
Transformer - 10 KVA		13	Each	1991	

Legend

UP – Underground Direct Buried 15 KV Primary Cable, 3-1/0 No.1 Type
OP – Overhead Primary Service, 4#2 ACSR 3-phase, 4-wire

Symbol	If Copper:	If Aluminum:
S1	3/C-#10 With Ground Direct Bury 600V Power Cable	
S2	3/C-#8 With Ground Direct Bury 600V Power Cable	
S3	3/C-#6 With Ground Direct Bury 600V Power Cable	3/C-#4 With Ground Direct Bury 600V Power Cable
S4	3/C-#4 With Ground Direct Bury 600V Power Cable	3/C-#2 With Ground Direct Bury 600V Power Cable
S5	3/C-#3 With Ground Direct Bury 600V Power Cable	3/C-1/0 With Ground Direct Bury 600V Power Cable
S6	3/C-#2 With Ground Direct Bury 600V Power Cable	3/C-1/0 With Ground Direct Bury 600V Power Cable
S7	3/C-#1 With Ground Direct Bury 600V Power Cable	3/C-2/0 With Ground Direct Bury 600V Power Cable

Hammond Range

This range receives electrical service from the South Alabama Electrical Cooperative.

Table 3
Fixed Inventory
Electrical Distribution System – Hammond Range

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Underground Primary	7.2 KV	350	Linear Feet	Unknown	
Underground Primary	#4 - 15 KV	350	Linear Feet	1984	
Underground Secondary	3-#2 Copper	350	Linear Feet	1984	
Underground Secondary	3-#10	100	Linear Feet	1984	From building to building

Hatch Stagefield

This stagefield is currently unutilized, but receives electrical service from the Alabama Power Company when in use.

Table 4
Fixed Inventory
Electrical Distribution System – Hatch Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Secondary	Unknown	105	Linear Feet	Unknown	
Secondary	Unknown	75	Linear Feet	Unknown	
Secondary	Unknown	75	Linear Feet	Unknown	
Secondary	Unknown	90	Linear Feet	Unknown	
Secondary	3-#2 600V	135	Linear Feet	1975	
Transformer – 50 KVA		1	Each	Unknown	
Transformer – 25 KVA		1	Each	Unknown	

Hooper Stagefield

This stagefield receives electrical service from the Pea River Electrical Cooperative.

Table 5
Fixed Inventory
Electrical Distribution System – Hooper Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Underground Secondary	3-#2 AWG 600V	180	Linear Feet	1975	
Underground Secondary	Unknown	500	Linear Feet	Unknown	
Transformer, pole-mounted – 50 KVA		1	Each	1975	

Molinelli Forward Arming and Refueling Point - Tower Area

This area receives electrical service from the Pea River Electrical Cooperative. The primary power is 13.2/7.62 KV.

Table 6
Fixed Inventory
Electrical Distribution System – Molinelli Forward Arming and Refueling Point -Tower Area

Item	Material	Quantity	Unit	Approximate Ye ar of Construction	Comments
Overhead Primary	#2 15 KV, 1?	1,000	Linear Feet	Unknown	
Underground Primary	Unknown	3,62	Linear Feet	1991	
Secondary	3-#6	100	Linear Feet	Unknown	
Secondary	3-#2	350	Linear Feet	Unknown	
Underground Secondary	Unknown	230	Linear Feet	1991	
Underground Secondary	3-#10, 1-#12 Ground Copper	200	Linear Feet	1991	
Transformer – 37.5 KVA		1	Each	Unknown	
Transformer – (unknown size)		5	Each	1991	

Range Control
This area receives electrical service from the Covington Electrical Cooperative.

Table 7
Fixed Inventory
Electrical Distribution System – Range Control

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Overhead Primary	Unknown	360	Linear Feet	Unknown	
Overhead Primary	Unknown	210	Linear Feet	1991	
Overhead Primary	4-#6 Aluminum	780	Linear Feet	1991	
Overhead Secondary	Unknown	180	Linear Feet	Unknown	
Overhead Secondary	4/0 Aluminum	150	Linear Feet	1991	
Transformer – 37.5 KVA		3	Each	1991	
Transformer – 25 KVA		1	Each	1991	
Transformer – 15 KVA		3	Each	1991	

Tabernacle Stagefield
This stagefield receives electrical service from the South Alabama Electrical Cooperative.

Table 8
Fixed Inventory
Electrical Distribution System – Tabernacle Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Primary	3-#400 mcm	Unknown	Linear Feet	Unknown	
Secondary	3-#2	100	Linear Feet	Unknown	
Secondary	3-#1/0	100	Linear Feet	Unknown	
Secondary	1-#4	100	Linear Feet	Unknown	
Secondary	3-#2	400	Linear Feet	Unknown	
Secondary	1-#4	400	Linear Feet	Unknown	
Transformer – 75 KVA		1	Each	Unknown	

J01.2.1.2.B Electrical Distribution System Inventory – Basefields

Cairns Army Airfield

Table 9
Fixed Inventory
Electrical Distribution System – Cairns Army Airfield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Overhead Primary	12.5 kV, 3 phase, small	2.61	Circuit Miles	1983	
Overhead Primary	7.2 kV, 1 phase	0.94	Circuit Miles	1983	
Overhead Secondary		0.89	Circuit Miles	1983	
Capacitors		600	Units	1983	
Underground Primary	12.5 kV, 3 phase,	0.46	Circuit	1983	

	small		Miles	
Underground Primary	7.2 kV, 1 phase	0.66	Circuit	1983
			Miles	
Underground Primary	3 phase	1.36	Circuit	1979
			Miles	
Underground Primary	3 phase	1.62	Circuit	1985
			Miles	
Underground		0.28	Circuit	1983
Secondary			Miles	
Transformer, pole-mounted - 15 kVA and smaller		6	Each	1982
Transformer, pole-mounted - 25 kVA		7	Each	1982
Transformer, pole-mounted - 37.5 kVA		8	Each	1982
Transformer, pole-mounted - 50 kVA		18	Each	1982
Transformer, pole-mounted - 75 kVA		8	Each	1982
Transformer, pole-mounted - 100 kVA		12	Each	1982
Transformer, pad-mounted - 1? , 50 kVA and smaller		4	Each	1983
Transformer, pad-mounted - 1? , 100 kVA		3	Each	1983
Transformer, pad-mounted - 3? , 75 kVA and smaller		1	Each	1983
Transformer, pad-mounted - 3? , 150 kVA		2	Each	1983
Transformer, pad-mounted - 3? , 300 kVA		1	Each	1983
Transformer, pad-mounted - 3? , 500 kVA		4	Each	1983

Shell Army Heliport

Table 10
Fixed Inventory
Electrical Distribution System – Shell Army Heliport

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Overhead		9,050	Linear Feet	2001	
Underground		3,135	Linear Feet	Unknown	
Transformer - (unknown sizes)		Unknown	Each	Unknown	Total KVA - 878

J01.2.1.2.C Electrical Distribution System Inventory – Outlying Stagefields

10-C Stagefield

This stagefield receives electrical service from Covington Electric Cooperative.

Table 11
Fixed Inventory
Electrical Distribution System – 10-C Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Primary	2-#2 15KV 1?	570	Linear Feet	Unknown	
Secondary	3-#1/0	480	Linear Feet	Unknown	
Secondary	1-#4	480	Linear Feet	Unknown	
Secondary	11-#10	120	Linear Feet	Unknown	
Transformer – 75 KVA		1	Each	Unknown	

Allen Stagefield

This stagefield receives electrical service from the Alabama Power Company. Primary power is 7,200-volt single phase.

Table 12
Fixed Inventory
Electrical Distribution System – Allen Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Primary	2-#2 Cu	1,300	Linear Feet	Unknown	
Secondary	3-#6 Cu	180	Linear Feet	Unknown	
Secondary	3-#2 Cu	200	Linear Feet	Unknown	
Transformer - 25 KVA		2	Each	Unknown	

Brown Stagefield

This stagefield receives electrical service from Covington Electric Cooperative. The primary power is 15,000 volts.

Table 13
Fixed Inventory
Electrical Distribution System – Brown Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Primary	2-#2	3,000	Linear Feet	Unknown	
Primary	1-#6	3,000	Linear Feet	Unknown	
Secondary	3-#1/0	100	Linear Feet	Unknown	
Secondary	1-#4	100	Linear Feet	Unknown	
Secondary	2-#1/0	220	Linear Feet	Unknown	
Secondary	1-#12	220	Linear Feet	Unknown	
Transformer, pad-mounted - 100 KVA		1	Each	Unknown	

Goldberg Stagefield
This stagefield receives electrical service from the Pea River Electric Cooperative. Primary power is 15,000 volts.

Table 14
Fixed Inventory
Electrical Distribution System – Goldberg Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Primary	3-#4 Cu	1,600	Linear Feet	Unknown	
Secondary	2-#2 Cu	3,200	Linear Feet	Unknown	
Transformer – 75 KVA		1	Each	Unknown	
Transformer - 25 KVA		1	Each	Unknown	

High Bluff Stagefield
This stagefield receives electrical service from the Wiregrass Electric Cooperative.

Table 15
Fixed Inventory
Electrical Distribution System – High Bluff Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Secondary	3-#6	45	Linear Feet	1966	
Secondary	3-#2	200	Linear Feet	1973	
Secondary	Unknown	200	Linear Feet	Between 1966 - 1973	
Secondary	3-#6	70	Linear Feet	1973	
Secondary	3-#1 600V	360	Linear Feet	1974	
Transformer – 37.5 KVA		1	Each	Unknown	

High Falls Stagefield
This stagefield is currently unutilized.
This stagefield receives electrical service from the Wiregrass Electric Cooperative.

Table 16
Fixed Inventory
Electrical Distribution System – High Falls Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Overhead Primary	Unknown	180	Linear Feet	Unknown	
Overhead Secondary	Unknown	180	Linear Feet	Unknown	

Hunt Stagefield
This stagefield receives electrical service from the Alabama Power Company.

Table 17
Fixed Inventory
Electric Distribution System – Hunt Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Primary	3-#4 Cu, 15 KV	1,135	Linear Feet	Unknown	
Primary	1-#4 Cu, 600V	1,135	Linear Feet	Unknown	
Secondary		60	Linear Feet	Unknown	
Transformers (unknown size)		Unknown	Each	Unknown	Total KVA - 160

Louisville Stagefield
This stagefield is currently unutilized. This stagefield receives electrical service from the Pea River Electric Cooperative when in use.

Table 18
Fixed Inventory
Electrical Distribution System – Louisville Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Primary	1-#2 15 KV, 1?	1,600	Linear Feet	Unknown	
Secondary	1-#4 600V	1,200	Linear Feet	Unknown	
Secondary	3-#2 600 V	80	Linear Feet	Unknown	
Transformer – 37.5 KVA		1	Each	Unknown	
Transformer – 25 KVA		1	Each	Unknown	

Skelly Stagefield
This stagefield receives electrical service from by the Covington Electric Cooperative.

Table 19
Fixed Inventory
Electrical Distribution System – Skelly Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Overhead		4,250	Linear Feet	Unknown	
Underground		710	Linear Feet	Unknown	
Transformer - (unknown size)		Unknown	Each	Unknown	Total KVA – 77.5

Stinson Stagefield
This stagefield receives electrical service from the Covington Electric Cooperative.

Table 20
Fixed Inventory
Electrical Distribution System – Stinson Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Primary	2-#2 15 KV	600	Linear Feet	Unknown	
Secondary	3-#1/0	80	Linear Feet	Unknown	To first building

Secondary	1-#4	80	Linear Feet	Unknown	
Secondary	3-#4	220	Linear Feet	Unknown	Between buildings
Secondary	1-#4	220	Linear Feet	Unknown	
Transformer, pad-mounted – 100 KVA		1	Each	Unknown	

TAC-Runkle Stagefield

This stagefield is currently unutilized. This stagefield receives electrical service from the Covington Electric Cooperative.

Table 21
Fixed Inventory
Electrical Distribution System – TAC-Runkle Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Overhead Primary	Unknown	3,200	Linear Feet	Unknown	
Underground Primary	3-#2	2,000	Linear Feet	Unknown	
Secondary		1,200	Linear Feet	Unknown	
Transformer – 50 KVA		1	Each	Unknown	
Transformer – 37 KVA		1	Each	Unknown	
Transformer – 25 KVA		1	Each	Unknown	

TAC-X Stagefield

This stagefield is currently unutilized. This stagefield receives electrical service from the Wiregrass Electric Cooperative. Primary power is 13,200 volts.

Table 22
Fixed Inventory
Electrical Distribution System – TAC-X Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Primary48	4-#4 ACSR	100	Linear Feet	1974	
Primary		1,700	Linear Feet	Unknown	
Secondary	Unknown-#2Cu	1,800	Linear Feet	Unknown	
Secondary	Unknown-#2	870	Linear Feet	Unknown	
Secondary	Unknown	850	Linear Feet	Unknown	
Transformer – 50 KVA		3	Each	Unknown	
Transformer – 37.5 KVA		3	Each	Unknown	
Transformer – 25 KVA		3	Each	Unknown	
Transformer – 15 KVA		1	Each	Unknown	
Transformer – 10 KVA		4	Each	Unknown	

Toth Stagefield

This stagefield receives electrical service from the Wiregrass Electric Cooperative. Primary voltage is 13,200/7,600 volts.

Table 23
Fixed Inventory
Electrical Distribution System – Toth Stagefield

Item	Material	Quantity	Unit	Approximate Year of Construction	Comments
Primary	3-#2	800	Linear Feet	1987	
Secondary	Unknown	150	Linear Feet	Unknown	To Stagehouse
Secondary	Unknown	550	Linear Feet	Unknown	To Lighting Vault
Secondary	Unknown	180	Linear Feet	Unknown	To Fire Station
Transformer – 37.5 KVA		1	Each	Unknown	

J01.2.2 Electrical Distribution System Non-Fixed Equipment and Specialized Tools Inventory

Table 24 lists other ancillary equipment (spare parts) and **Table 25** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

Table 24
Spare Parts
Electrical Distribution System – Fort Rucker

Qty	Item	Make/Model	Description	Remarks
None.				

Table 25
Specialized Equipment and Vehicles
Electrical Distribution System – Fort Rucker

Description	Quantity	Location	Maker
None.			

J01.2.3 Electrical System Manuals, Drawings, and Records Inventory

Table 26 lists the manuals, drawings, and records that will be transferred with the system.

Table 26
Manuals, Drawings, and Records
Electrical Distribution System – Fort Rucker

Qty	Item	Description	Remarks
The Installation maintains a limited collection of manuals, drawings and records on installed components of the electrical system. These may not be completely up-to-date and may show elements as active that have been abandoned in place. This information or copies thereof will be transferred during the transition period.			

J01.3 Current Service Arrangement

Fort Rucker currently purchases wholesale electrical power for the Main Post and several nearby sites at 115 kV from Alabama Power Company (APC) at a single delivery point near the southern boundary of the Main Post. This point feeds the Main Post area and the Ech, Hanchey, Lake Tholocco, and Lowe sites from the metering point. As described in the above tables, service is also received from the South Alabama Electrical Cooperative, the Pea River Electrical Cooperative, and the Covington Electrical Cooperative at other sites within the boundaries of Fort Rucker. All electrical facilities located on the Installation are owned and operated by Fort Rucker.

Cairns Army Airfield is supplied at 12.5 kV from three separate distribution metering points. The majority of the airfield is served from an APC metering point. Two remote areas of the airfield are served from Pea River Electric Cooperative metering points.

Shell Army Heliport currently purchases wholesale electrical power at 115 kV from Alabama Power Company at a single delivery point.

The stagefields currently purchase electrical power from the Covington Electrical Cooperative, the Alabama Power Company, the Pea River Electric Cooperative, and the Wiregrass Electric Cooperative.

As required by this contract, the Contractor shall demonstrate the ability to meet and shall establish any and all requirements to provide electrical distribution service to Fort Rucker and associated basefields and stagefields.

J01.4 Secondary Metering

The Installation may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Clause C.3.

J01.4.1 Existing Secondary Meters

Table 27 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW Clauses C.3 and J01.5 below.

Table 27
Existing Secondary Meters
Electrical Distribution System – Fort Rucker

Meter Location	Description
105	AAFES, Telcom Center
106	AAFES, Troop Store
112	DPCA, O-Club Pool

113	DPCA, O-Club
119	AAFES, Mini-Mall
124	Guest House
146	DEH, BOQ
301	Hospital
301	Hospital
303	DEH, BOQ
304	DEH, BOQ
305	DEH, BOQ
308	DEH, BOQ, Hi-Rise
309	DEH, BOQ
310	DEH, BOQ
312	DEH, BOQ
313	DEH, BOQ
314	DEH, BOQ
315	DEH, BOQ
613	Corps of Engineers

J01.4.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Tables 28 and 29**. New secondary meters shall be installed IAW Clause C.13, Operational Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Clauses C.3 and J01.5 below.

Table 28
New Secondary Meters
Electrical Distribution System – Fort Rucker

Meter Location: Building Number	Meter Description
Various	Vending Machines
Lowe Field	Snack Bar
Hanchey Field	Snack Bar
L206H	Blue Springs
L241C	TAC-Runkle
114	Post Headquarters
124	Army Guest House
146	UOQ
301	Alabama Department of Rehabilitation, Service Vendors
308	MWR Lounge
514	Supply Services
2806	Youth Center
5000	TAC Shipping/Receiving Facility
5430	USACIDC Headquarters
5700	Alabama Department of Rehabilitation, Service Vendors
6904	USAARL
26808	Lyster Army Hospital Flatiron Building

Table 29
New Secondary Meters
Electrical Distribution System – Shell Army Heliport

Meter Location: Building Number	Meter Description
Various	Vending Machines*

*Flat Rate agreements may be possible.

J01.5 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following: Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to the Contracting Officer's designee. (This information will be provided upon award)

Outage Report. The Contractor's monthly outage report will be prepared by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

Scheduled: Requestor, date, time and duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

Unscheduled: Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award)

Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award)

System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the 25th of each month for the previous month. System efficiency reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award)

J01.6 Energy Savings Projects

IAW C.3, Utility Service Requirement. The following projects have been implemented by the Government for energy conservation purposes:

?? Peak shaving generators - Four (4) natural gas-fueled, 1 megawatt generators currently remotely activated by the Alabama Power Company. The installation shall retain ownership of these facilities.

J01.7 Service Area

IAW Clause C.4, Service Area. The service area is defined as the cantonment area of Fort Rucker, otherwise known as the Main Post, as well as the three housing areas (Allen Heights, Bowden Terrace, and Munson Heights). The Aerial Gunnery Range, Ech, Hanchey, Knox, Hammond, Molinelli, Range Control, Tabernacle, Hatch, Hooper, Lake Tholocco, and Lowe sites are also included in the service area. The service area of Shell Army Heliport and Cairns Army Airfield is defined as the area within the boundaries of the basefields.

In the case of the stagefields, the service area is defined as the boundaries of each stagefield. To provide an overview the following table lists approximate distances to the Daleville gate of Fort Rucker by air, direction from gate, size of the stagefield in acres, number of buildings, and date acquired.

Table 30
Service Areas
Electrical Distribution System – Fort Rucker Stagefields

Stagefield	Distance (Miles)	Direction	Size (Acres)	Numbers of Buildings	Date Acquired
10-C Stagefield	13	W, SW	180	5	1987
Allen Stagefield	4½	S, SW	114	6	1960
Brown Stagefield	9	W, NW	176	5	1987
Goldberg Stagefield	9½	E, NE	100	8	1961
High Bluff Stagefield	7½	S	190	6	1966
High Falls Stagefield	10	S, SW	40	3	1967
Hunt Stagefield	5	E, NE	153	5	-
Louisville Stagefield	21	N	104	8	1970
Skelly Stagefield	15	W, SW	194	5	-
Stinson Stagefield	10	W	191	5	1987
TAC-Runkle Stagefield	14½	W	235	13	-
TAC-X Stagefield	13	SW	111	4	-
Toth Stagefield	6½	SE	128	5	-

J01.8 Off-Installation Sites

There are no off-installation sites included in this package.

J01.9 Specific Transition Requirements

IAW Clause C.13, Operational Transition Plan. **Table 31** lists service connections and disconnections required upon transfer, and **Table 32** lists the improvement projects required upon transfer of the Fort Rucker electrical distribution system.

Table 31
Service Connections and Disconnections
Electrical Distribution System – Fort Rucker

Location	Description
None.	

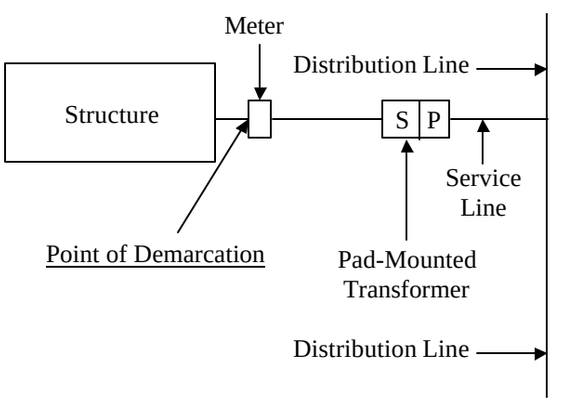
Table 32
System Improvement Projects
Electrical Distribution System – Fort Rucker

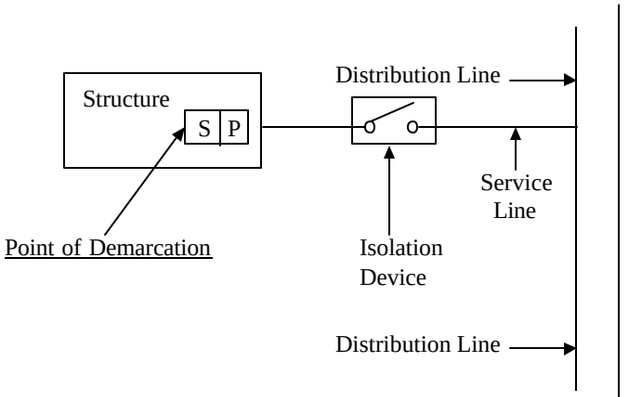
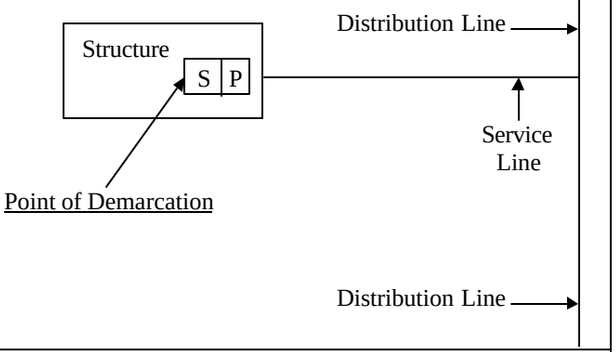
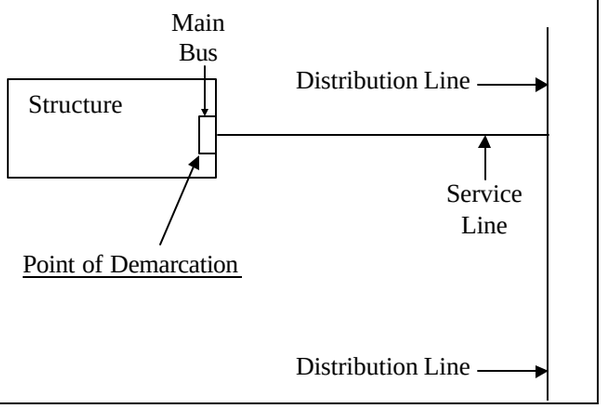
Location	Description
None.	

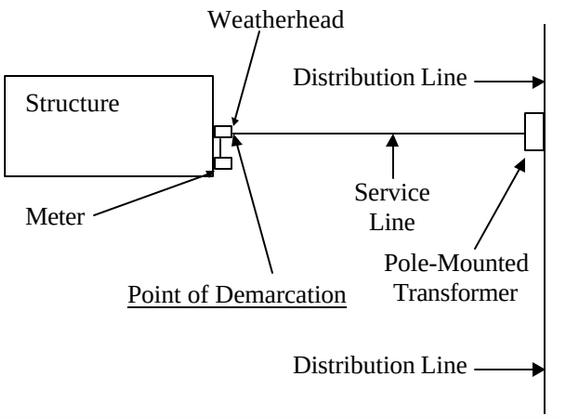
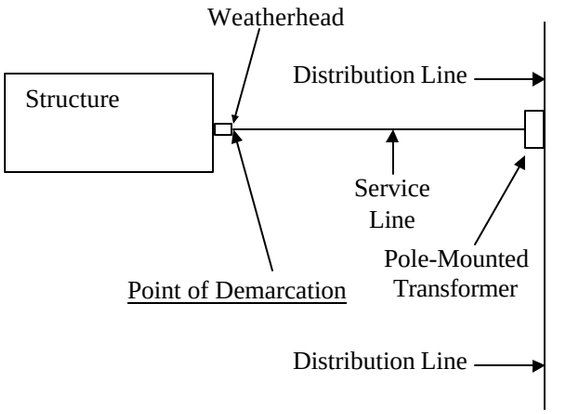
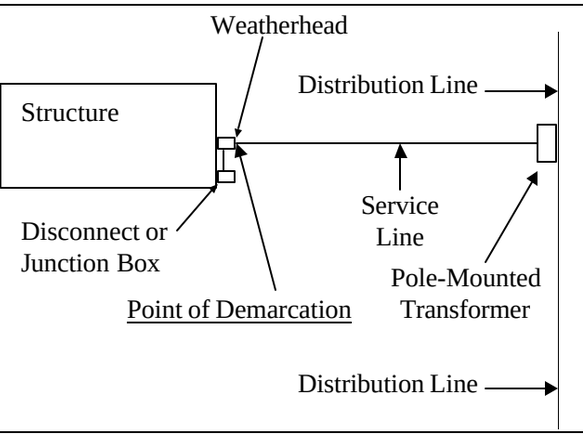
J01.10 Electrical Distribution System Points of Demarcation

The point of demarcation is defined as the point in the distribution system where ownership changes from the Grantee to the building owner. This point of demarcation will typically be at the point the utility enters a building structure or the load side of a transformer within a building structure. The table below identifies the type and general location of the point of demarcation with respect to the building for each scenario.

Table 33
Points of Demarcation
Electrical Distribution System – Fort Rucker

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the down-current side of the meter.	Residential service (less than 200 amps and 240V 1-Phase), and 3-phase self-contained meter installations. Electrical meter exists within five feet of the exterior of the building on an underground secondary line.	

Point of demarcation is the secondary terminal of the transformer inside the structure.	Transformer located inside of structure and an isolation device is in place with or without a meter. Note: Utility Owner must be granted 24-hour access to transformer room.	
Point of demarcation is the secondary terminal of the transformer inside of the structure.	Transformer located inside of structure with no isolation device in place. Note: Utility Owner must be granted 24-hour access to transformer room	
Point of demarcation is the main bus of the building electricalal panel		

Point of demarcation is the point where the overhead conductor is connected to the building weatherhead.	Electrical meter is connected to the exterior of the building on an overhead secondary line.	
Point of demarcation is the point where the overhead conductor is connected to the building weatherhead.	Pole-mounted transformer is located outside of structure with secondary attached to outside of structure with no meter.	
Point of demarcation is the point where the overhead conductor is connected to the building weatherhead.	Service may be overhead or underground. A disconnect switch or junction box is mounted to the exterior of the structure with no meter.	

J01.10.1 Unique Points of Demarcation

The following table lists anomalous points of demarcation that do not fit any of the above scenarios.

Table 34
Unique Points of Demarcation
Electrical Distribution System – Fort Rucker

Building No.	Point of Demarcation Description
None.	

J01.11 Plants and Substations

The following table lists plants and substations that will be transferred as part of the utilities privatization effort.

Table 35
Plants and Substations
Electrical Distribution System – Fort Rucker

Description	Facility #	State Coordinates	Other Information
Main	410	Available on base mapping	(Refer to Table 1)
Substation 1	6480	Available on base mapping	(Refer to Table 1)
Substation 2	8980	Available on base mapping	(Refer to Table 1)
Substation 3	5180	Available on base mapping	(Refer to Table 1)